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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,096	12/29/1999	AMIT A. MERCHANT	219.37081X00	1863

20457 7590 07/16/2003

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EXAMINER

DONAGHUE, LARRY D

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/474 096

Applicant(s)

Examiner

Larry Donaghue

Group Art Unit

2154

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 4/24/03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-17 is/are pending in the application.
- ☐ Of the above claim(s) 13-17 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-12 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

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1. Claims 1-19 are presented for examination.
2. Applicant's election with traverse of Invention I in Paper No. 3 is acknowledged. The traversal is on the ground(s) that subject matter is sufficient that the search would not be an undue burden. This is not found persuasive because the applicant points out that claims 1, 2 and 3 would appear to cover claim 13, however claims 2 and 5 are both directly dependent from claim 1, indicating separate patentability of the elements in claims 2 and 5, and therefore distinct.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 13-19 are withdrawn from further consideration as directed to the non-elected invention.
4. The restriction requirement is set forth, below.
5. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-12, drawn to replay system including a checker and a queue for temporally storing instruction which have not executed properly, classified in class 712 , subclass 218.
 - II. Claims 13-17 , drawn to determine between instruction types or operation and on that basis routing the instruction back to the execution unit or to the temporally buffer, classified in class 712, subclass 225.
 - III. Claims 18-19, drawn to in then instruction is a agent instruction and performing the operation of the replay system on that basis, classified in class 712, subclass 227 .

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6. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I and III has separate utility such as in a system without agent instructions. See MPEP § 806.05(d).

7. Inventions I and III and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions I and III has separate utility such as system that doesn't require the determination between instruction types or operation and on that basis routing the instruction back to the execution unit or to the temporally buffer . See MPEP § 806.05(d).

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

9. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

10. Because these inventions are distinct for the reasons given above and the search required for Groups II and III is not required for Group I, restriction for examination purposes as indicated is proper.

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11. Claims 1-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of U.S. Patent No. 6,385,715. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application merely claims one of the plurality replay queues as claimed in the 6,385,715 patent .

Claim 1 of the instant patent set forth an execution unit, a replay system , a checker and a replay queue.

Claimed in Patent 6,385,715, claim 1 is an execution unit, a replay system, a checker and a plurality of replay queues.

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1 and rejected under 35 U.S.C. 102(e) as being anticipated by Sager et al. (5,519,841).

Sager et al. taught the invention as claimed including an execution unit (col. 49, lines 10-65), a replay system (figure 18, col. 9, line 23 - col. 10, line 30), a checker (col. 46, lines 27-32) and a replay queue (44).

As to claim 7, Sager et al. A first level cache (54), a second level cache (64) and accessing external memory (col. 4, lines 48-55; col. 10, lines 41-56).

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Merchant et al. 6,094,717

Steely Jr. 5197,132

14. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C 133.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. Donaghue whose telephone number is (703) 305-9675. The examiner can normally be reached on M-F from 8:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An , can be reached on (703) 305-9678. The fax phone number for an official fax is (703) 746-7238, an after-final fax is 703-746-7238 and a draft or non-official fax is 703-746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LARRY D. DONAGHUE
PRIMARY EXAMINER

A handwritten signature in black ink, consisting of a large, stylized 'L' followed by a horizontal line extending to the right.

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